

AMENDMENTS TO THE CLAIMS

1. (Original) A multimetal oxide of the formula I,



where

- a is from 0.3 to 1.9,
- Q is an element selected from among P, As, Sb and/or Bi,
- b is from 0 to 0.3,
- M is a metal selected from among Nb, Ce, W, Mn, Ta, Pd, Pt, Ru and Rh,
- c is from 0.001 to 0.2, with the proviso that $(a-c) \geq 0.1$,
- d is a number which is determined by the valence and abundance of the elements other than oxygen in the formula I and
- e is from 0 to 20,

which has a crystal structure whose X-ray powder diffraction pattern displays reflections at lattice plane spacings d of 15.23 ± 0.6 , 12.16 ± 0.4 , 10.68 ± 0.3 , 3.41 ± 0.04 , 3.09 ± 0.04 , 3.02 ± 0.04 , 2.36 ± 0.04 and $1.80 \pm 0.04 \text{ \AA}$.

2. (Original) The multimetal oxide according to claim 1 in which

- b is 0 and
- c is from 0.01 to 0.1.

3. (Currently amended) The multimetal oxide according to claim 1 [or 2] which has a specific surface area determined by the BET method of from 3 to $250 \text{ m}^2/\text{g}$.

4. (Currently amended) The multimetal oxide according to ~~any of claims 1 to 3~~ claim 1, in which M is Ce or Mn.

5. cancel

6. (Currently amended) A precatalyst which can be converted into a catalyst for the gas-phase partial oxidation of aromatic hydrocarbons and comprises an inert nonporous support and at least one layer comprising a multimetal oxide according to claim 1 ~~any of claims 1 to 4~~ applied thereto.

7. (Original) The precatalyst according to claim 6 which comprises from 5 to 25% by weight, based on the total weight of the precatalyst, of multimetal oxide.

8. (Currently amended) The precatalyst according to claim 6 [~~or 7~~] whose inert nonporous support material comprises steatite.

9. (Currently amended) A catalyst for the gas-phase partial oxidation of aromatic hydrocarbons which comprises an inert nonporous support and, applied thereto, at least one layer comprising, as catalytically active composition, a silver-vanadium oxide bronze which comprises at least one metal M selected from the group consisting of Nb, Ce, W, Mn, Ta, Pd, Pt, Ru and Rh and/or in which the Ag:V atomic ratio is from 0.15 to 0.95 and the M:V atomic ratio is from 0.0005 to 0.25, which catalyst can be produced from a multimetal oxide composition according to claim 1 ~~or a precatalyst according to claim 6~~.

10. (Original) The catalyst according to claim 9, wherein the silver-vanadium bronze contains Ce or Mn.

11. (Currently amended) The catalyst according to claim 9 [~~or 10~~] having a layer whose catalytically active composition has a BET surface area of from 2 to 100 m²/g.

12. (Currently amended) A process for preparing aldehydes, carboxylic acids and/or carboxylic anhydrides, in which a gaseous stream which comprises bringing into contact an

aromatic hydrocarbon and a gas comprising molecular oxygen ~~is brought into contact~~ with a catalyst according to claim 9 any of claims 9 to 11 at elevated temperature.

13. (Currently amended) The process according to claim 12, wherein the catalyst is produced in situ from a precatalyst ~~according to any of claims 6 to 8 which can be converted into a catalyst for the gas-phase partial oxidation of aromatic hydrocarbons and comprises an inert nonporous support and at least one layer comprising a multimetal oxide of the formula I,~~



where

a is from 0.3 to 1.9,

Q is an element selected from among P, As, Sb and/or Bi,

b is from 0 to 0.3,

M is a metal selected from among Nb, Ce, W, Mn, Ta, Pd, Pt, Ru and Rh,

c is from 0.001 to 0.2, with the proviso that (a-c) > 0.1,

d is a number which is determined by the valence and abundance of the elements other than oxygen in the formula I and

e is from 0 to 20,

which has a crystal structure whose X-ray powder diffraction pattern displays reflections at lattice plane spacings d of 15.23 + 0.6, 12.16 + 0.4, 10.68 + 0.3, 3.41 + 0.04, 3.09 + 0.04, 3.02 + 0.04, 2.36 + 0.04 and 1.80 + 0.04 Å.

14. (Currently amended) The process according to claim 12 [~~or 13~~], wherein the reaction mixture obtained or a fraction thereof is brought into contact with at least one further catalyst whose catalytically active composition comprises vanadium pentoxide and anatase.

15. (Currently amended) The process according to claim 14, wherein the gaseous stream is passed successively over a bed of an upstream catalyst and a bed or a downstream catalyst, where the bed of upstream catalyst comprises a catalyst comprises an inert nonporous support and, applied thereto, at least one layer comprising, as catalytically active composition, a silver-vanadium oxide bronze which comprises at least one metal M selected from the group consisting of Nb, Ce, W, Mn, Ta, Pd, Pt, Ru and Rh and/or in which the Ag:V atomic ratio is from 0.15 to 0.95 and the M:V atomic ratio is from 0.0005 to 0.25, which catalyst can be produced from said mult metal oxide of formula (I) according to claim 9 and the bed of downstream catalyst comprises at least one catalyst whose catalytically active composition comprises vanadium pentoxide and anatase.

16. (Original) The process according to claim 15, wherein the catalytically active composition of the downstream catalyst comprises from 1 to 40% by weight of vanadium oxide, calculated as V_2O_5 , from 60 to 99% by weight of titanium dioxide, calculated as TiO_2 , up to 1% by weight of a cesium compound, calculated as Cs, up to 1% by weight of a phosphorus compound, calculated as P, and up to 10% by weight of antimony oxide, calculated as Sb_2O_3 .

17. (Original) The process according to claim 16, wherein the bed of the downstream catalyst comprises at least two layers of catalysts whose catalytically active composition has a differing Cs content, with the Cs content decreasing in the flow direction of the gaseous stream.

18. (Currently amended) The process according to ~~any of claims 12 to 17~~ claim 12, wherein o-xylene or naphthalene or a mixture of o-xylene and naphthalene is used as aromatic hydrocarbon and is oxidized to phthalic anhydride.